



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,215	02/25/2004	Hugh S. West JR.	14000.8.1.2	3044

7590 08/14/2006  
John M. Guynn  
WORKMAN, NYDEGGER & SEELEY  
1000 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, UT 84111

EXAMINER

CUMBERLEDGE, JERRY L

ART UNIT	PAPER NUMBER
----------	--------------

3733

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,215

Applicant(s)

WEST ET AL.

Examiner

Jerry Cumberledge

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05/27/04</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 11-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Goble et al. (US Pat. 5,713,897).

Goble et al. disclose a suture pulley assembly (Fig. 1, ref. 80) comprising: a pulley wheel comprising first (Fig. 1, ref. 93) and second pulley plates, sized and positioned so as to define a pulley space therebetween. The second pulley plate can be considered to be plate 94 (Fig. 1) in conjunction with the wheel 97 (Fig. 1). The pulley space is the area between the first plate and the wheel 97. Attaching means (Fig. 7, ref. 95) for rotatably (column 8, lines 66-67 and column 9, lines 1-3) attaching the pulley wheel to an adjustable tension applicator (Fig. 1, ref. 20) of the graft tensioning device; and biasing means (Fig. 7, ref. 100) for biasing at least one of the pulley plates toward the other of the pulley plates. The attachment means comprising a post (Fig. 7, ref. 95) that passes through a central recess of each pulley plate and that is attached at a first end to the adjustable tension applicator of the graft tensioning device. The end of the post that is furthest from the pointer body 98 (Fig. 7) can be considered to be the first end of the post. The post is fixedly attached to the adjustable tension applicator. The post further comprises a flange (Fig. 7, ref. 99) at a second end opposite the first end

Art Unit: 3733

and adjacent to one of the pulley plates (Fig. 7), the flange overlapping at least a portion of an outer surface of the pulley plate adjacent to the flange (Fig. 7). The biasing means comprise a spring (Fig. 7, ref 100). The spring being positioned between one of the pulley plates and the adjustable tension applicator of the graft tensioning device (Fig. 8). The first and second pulley plates can spread apart relative to each other so as to selectively define a larger pulley space in response to tying a half knot within one or more suture strands and then clamp the half knot while a remaining portion of the suture knot is tied. The first and second pulley plates can spread apart relative to each other so as to selectively define a larger pulley space in response to inserting a suture having a knot into the pulley space. The first and second pulley plates are capable of spreading apart. The spring is attached to plate 93 and wheel 97 (column 9, lines 16-18), creating a tension between those plates, which would cause a deformation of the plates towards each other. Inserting an object, such as a suture, between plate 93 and wheel 97 would create a force that would push the plates away from each other temporarily, until the object is removed.

Goble et al. further disclose a graft tensioning device (Fig. 1) for use in joint repair surgery, comprising: a suture pulley assembly (Fig. 1, ref. 80); at least one adjustable tension applicator (Fig. 1, ref. 20) to which the suture pulley assembly is rotatably (column 8, lines 66-67 and column 9, lines 1-3) attached and which is configured to apply a desired tensile load to a looped suture attached to free ends of a looped tissue graft, the suture pulley assembly equalizing a tensile load applied by the adjustable tension applicator to each side of the looped suture.

Goble et al. further disclose, in a graft tensioning device for use in joint repair surgery, a suture pulley assembly comprising: a pulley wheel comprising first (Fig. 1, ref. 93) and second pulley plates sized and positioned so as to define a pulley space therebetween. The second pulley plate can be considered to be plate 94 (Fig. 1) in conjunction with the wheel 97 (Fig. 1). The pulley space is the area between the first plate and the wheel 97. Goble et al. further discloses a post (Fig. 7, ref. 95) attached at a first end to an adjustable tension applicator of the tensioning device. The post passes through a central recess of each of the first and second pulley plates so as to rotatably (column 8, lines 66-67 and column 9, lines 1-3) attach the pulley wheel to the adjustable tension applicator (Fig. 1, ref. 20), and a spring (Fig. 7, ref. 100) positioned relative to at least one of the first and second pulley plates so as to bias at least one of the pulley plates toward the other of the pulley plates. The first and second pulley plates have inner surfaces that define the pulley space. The inner surfaces are the surfaces of the plate that are facing each other. At least a portion of the inner surfaces of the first and second pulley plates being angled so that at least a portion of the pulley space has decreasing width from an outer perimeter of the pulley plates toward a center of the pulley wheel. Considering the second pulley plate to be plate 94 (Fig. 1) in conjunction with the wheel 97 (Fig. 1), then the width of the pulley space is wider near the top of the pulley wheel, where the wheel 97 (Fig. 1) does not extend, than it is where the wheel 97 (Fig. 1) does extend. A portion of the pulley space nearest the center of the pulley wheel has a constant width. The pulley space nearest the center of the pulley wheel has a constant width, because wheel 97 (Fig. 1) and the first pulley plate have a constant

Art Unit: 3733

width and are separated by a constant distance (Fig. 4). The first and second pulley plates are capable of spreading apart so as to temporarily define a larger pulley space in response to inserting a suture having a knot or half knot into the pulley space. The spring is attached to plate 93 and wheel 97 (column 9, lines 16-18), creating a tension between those plates, which would cause a deformation of the plates towards each other. Inserting an object, such as a suture, between plate 93 and wheel 97 would create a force that would push the plates away from each other temporarily, until the object is removed. The post is fixedly attached to the adjustable tension applicator. The post further comprises a flange (Fig. 7, ref. 99) at a second end opposite the first end and adjacent to one of the pulley plates, the flange overlapping at least a portion of an outer surface of the pulley plate adjacent to the flange (Fig. 7). The spring being positioned between one of the pulley plates and the adjustable tension applicator of the graft tensioning device (Fig. 8). The spring is positioned between one of the pulley plates and the flange of the post (Fig. 8). The device further comprises a sleeve (Fig. 7, ref. 86a) disposed around at least a portion of the post between the post and an inner edge of each pulley plate defining the central recess. The definition of "disposed," according to the American Heritage Dictionary of the English Language, Fourth Edition is "to place or set in a particular order; arrange." The sleeve is placed around or near to the post (Fig. 7). The spring is disposed around a portion of the sleeve. The spring is placed around or near to a portion of the sleeve. The device further comprises a washer (Fig. 8, ref. 26) disposed between the spring and the adjustable tension applicator of the graft tensioning device.

Goble et al. further disclose a graft tensioning device for use in joint repair surgery, comprising: at least one adjustable tension applicator (Fig. 1, ref. 20) configured to apply a desired tensile load to a looped suture attached to free ends of a looped tissue graft; and a suture pulley assembly (Fig. 1, ref. 80) rotatably (column 8, lines 66-67 and column 9, lines 1-3) attached to the adjustable tension applicator so as to equalize a tensile load applied by the adjustable tension applicator to each side of the looped suture, the suture pulley assembly comprising: a pulley wheel comprising first (Fig. 1, ref. 93) and second pulley plates sized and positioned so as to define a pulley space therebetween. The second pulley plate can be considered to be plate 94 (Fig. 1) in conjunction with the wheel 97 (Fig. 1). Goble et al. further disclose a post (Fig. 7, ref. 95) attached at a first end to an adjustable tension applicator of the graft tensioning device, the post passing through a central recess of each of the first and second pulley plates so as to rotatably attach the pulley wheel to the adjustable tension applicator; and a spring (Fig. 7, ref. 100) positioned relative to at least one of the first and second pulley plates so as to bias at least one of the pulley plates toward the other of the pulley plates.

With regard to statements of intended use and other functional statements (e.g. ...so as to equalize a tensile load applied by said adjustable tension applicator...), they do not impose any structural limitations on the claims distinguishable over the graft tensioning device of Goble et al., which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the

Art Unit: 3733

reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goble et al. (US Pat. 5,713,897) in view of Lewis et al. (US. Pat. 4,950,271).

Goble et al. disclose the claimed invention except for the graft tensioning device comprising two independently adjustable tension applicators and a separate suture pulley rotatably attached to each of the two independently adjustable tension applicators.

Lewis et al. disclose a graft tensioning device comprising two independently adjustable tension applicators (Fig. 2, ref. 62) and a separate suture pulley rotatably attached to each of the two independently adjustable tension applicators (Fig. 2, ref. 57), in order to apply different loads to a multiple strand or segment ligament graft and



Art Unit: 3733

to prescribe the load shared between the segments, which aids in proper joint reconstruction (column 1, lines 66-68 and column 2, lines 1-7).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the graft tensioning device of Goble et al. with two independently adjustable tension applicators and a separate suture pulley rotatably attached to each of the two independently adjustable tension applicators, in order to permit one to use the graft tensioning device of Goble et al. to apply different loads to a multiple strand or segment ligament graft and to prescribe the load shared between the segments, which aids in proper joint reconstruction (column 1, lines 66-68 and column 2, lines 1-7).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Cumberledge whose telephone number is (571) 272-2289. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLC



EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER